

REMARKS

In section 5 of the Office Action, the Examiner rejected claims 1-6 and 8-34 under 35 U.S.C. §102(b) as being anticipated by Martens.

Martens describes a police chase eliminator (PCEL) system 1 in which all new and used vehicles are fitted with a PCEL module that responds to signals from a remote PCEL control unit to control the vehicle. When a pursuit is initiated by a law enforcement officer, a signal is transmitted to every vehicle or a selected group of vehicles in the vicinity where the suspect vehicle is located. The law enforcement officer thus controls the targeted vehicle to slow or stop and such response is totally out of the control of the driver of the targeted vehicle.

The PCEL system 1 includes a vehicle module 10 and a remote control unit 20. The vehicle module 10 is installed in each new vehicle at the factory, or as a retrofit in the case of existing vehicles. The remote control units 20 are installed in police cars. Communications circuits 11 and 21 of the vehicle module 10 and the remote control units 20 communicate with one another to receive and transmit encrypted signals between them. The communications circuits 11 and 21 communicate

by audio, ultrasonic, optical or RF. The communications circuit 21 may transmit a weaker signal such that only the vehicle modules 10 within a limited distance will respond. The communications circuit 21 may also have a directional antenna allowing the beam direction and the beam width to be adjusted.

The vehicle module 10 may transmit vehicle identification data or it may carry out certain vehicle control functions such as operating (i) the vehicle's flashers continuously or periodically on command while the ignition is on, (ii) the head lights, travel lights and/or the horn to provide a signal to the enforcement officer in the police car or as a warning to the driver of the vehicle, (iii) to reduce fuel flow, and/or (iv) to reduce power to the vehicle's ignition circuit.

The vehicle's module 10 is programmed on a one-time only basis with such data as the host vehicle's serial or identification number (VIN), as well as the color, year, make and type of the vehicle.

The communications circuits 21 of the remote control units 20 operate in the wavelength specific to the vehicle modules 10.

The faceplate 30 of the remote control unit 20 is illustrated in Figure 2 and includes indicator colored

lights 32, a display screen 31, a keyboard 33, a power On/Off switch 42, selection keys 34 and 35 for selecting the color or vehicle type respectively for the vehicle being pursued, an antenna control switch 36 to point a directional antenna at a target vehicle, a "Find" key 37, a "Flash" key 38, a "Slow" key 39, a "Stop" key 40, and a "Reset" key 41.

The "Find" key 37 sends a request for a vehicle's VIN and descriptors. The "Flash" key 38 sends a command to the vehicle module 10 to flash visual indicators. The "Slow" key 39 causes a target vehicle(s) to slow down. The "Stop" key 40 causes a target vehicle(s) to stop. The "Reset" key 41 causes a target vehicle(s) to operate normally.

When an enforcement officer encounters a vehicle which he wishes to investigate, he may push the "Find" key 37 thereby emitting an encrypted RF radio signal calling for a vehicle to respond by transmitting its VIN and/or vehicle descriptors. The police officer verifies that the isolated VIN and vehicle descriptors correspond to the vehicle being pursued.

The police officer may also signal the vehicle to slow down or stop by pressing the "Slow" button 39 or the "Stop" button 40. The slow or stop signal may be

transmitted with a VIN component such that only the vehicle with the specific VIN will cause its controller 14 to control the vehicle.

When the officer presses the slow key, the engine of the target vehicle runs at steadily reducing RPM's so that the power steering and brakes continue to function normally, but with insufficient power to accelerate or even maintain its speed. The police officer may then press the "Stop" button when the vehicle has slowed down sufficiently, or sooner if the suspect makes no attempt to pull over to the side of the road during the slow-down phase.

In another embodiment, a PCEL system 2 includes a vehicle module 50, which is similar to module 10 of Figure 1, and a remote control unit 60, which functions somewhat differently from the remote control unit 20 of Figure 1 in that the remote control unit 60 transmits encrypted commands to the vehicle module 50 but it is incapable of receiving signals back from the vehicle module 50.

The remote control unit 20/60 includes a security device such as a data receiver 95, a cartridge slot 96, and a small dedicated antenna 97. The data receiver 95 may be a disc reader adapted to accept a disc

that is used to store data to be entered into the remote control unit 20/60 at the beginning of the police officer's shift.

The cartridge slot 96 is adapted to receive a cartridge 100. The cartridge 100 functions such that it must be in place in the cartridge slot 96 in order to make the remote control unit 20, 60 fully functional. While the cartridge is missing, the remote control unit 20, 60 will not respond until the police officer enters his Personal Identification Number (PIN), and even then, it will only remain operational for a limited period of time, allowing the police officer to operate the remote control unit 20, 60 if he happens to lose the cartridge 100 while outside his vehicle. However, he must continually reenter his PIN. This security feature prevents a thief who has stolen the police vehicle from using the PCEL control unit 20, 60.

After inserting the disc, the operator plugs the cartridge 100 into the cartridge slot 96 and then enters his Personal Identification Number (PIN) to start the remote control unit 20, 60. As a further security measure, it may be desirable to require the officer to reenter his PIN every 3 to 4 hours thereafter. This

prevents unauthorized use, which is particularly important if the police vehicle is stolen.

Also as a security measure, all PCEL transmissions will be securely encrypted and encoded to prevent unauthorized use.

Independent claim 35 is directed to a remote control system for remotely controlling at least one vehicle. The remote control system comprises a hand-held unit and a receiver. The hand-held unit transmits a wave coded signal, the wave coded signal transmitted by the hand-held unit is configured to cause the speed of the vehicle to be reduced in response to the wave coded signal, and the hand-held unit is capable of being used without a cable link to any other vehicle. The receiver is located at the vehicle for receiving the wave coded signal, and receipt of the wave coded signal in the vehicle causes the speed of the vehicle to be reduced.

Martens does not disclose a hand-held unit such that the hand-held unit transmits a wave coded signal, such that the wave coded signal transmitted by the hand-held unit is configured to cause the speed of the vehicle to be reduced in response to the wave coded signal, and such that the hand-held unit is capable of being used without a cable link to any other vehicle.

Accordingly, independent claim 35 is not anticipated by Martens.

Independent claim 51 is directed to a method of remotely controlling a vehicle comprising (i) transmitting a first wave coded signal from a hand-held unit being operated remotely from the vehicle or any other vehicle such that the first wave coded signal is configured to cause the vehicle to slow down without stopping, and (ii) transmitting a second wave coded signal from the hand-held unit being operated remotely from the vehicle or any other vehicle, wherein the second wave coded signal is configured to cause the vehicle to stop.

Martens does not disclose a hand-held unit that is operated remotely from the vehicle or any other vehicle and that transmits first and second wave coded signals such that the first wave coded signal is configured to cause the vehicle to slow down without stopping and such that the second wave coded signal is configured to cause the vehicle to stop.

Accordingly, independent claim 51 is not anticipated by Martens.

Independent claim 59 is directed to a method of remotely controlling a remotely operating vehicle

comprising accepting entry of a biometric input by a user such that transmission of a wave coded signal is secured, and transmitting the wave coded signal to the remotely operating vehicle upon entry of the biometric input, wherein the wave coded signal is configured to cause the remotely operating vehicle to reduce speed.

Martens does not disclose any unit that accepts entry of a biometric input by a user such that transmission of a wave coded signal is secured, and that transmits the wave coded signal to the remotely operating vehicle upon entry of the biometric input such that the wave coded signal is configured to cause the remotely operating vehicle to reduce speed.

Accordingly, independent claim 59 is not anticipated by Martens.

Independent claim 61 is directed to a method of remotely controlling a remotely operating vehicle comprising accepting entry of a password by a user such that transmission of a wave coded signal is secured, and transmitting the wave coded signal to the remotely operating vehicle upon entry of the password such that the wave coded signal is configured to cause the remotely operating vehicle to reduce speed.



Martens does not disclose any unit that accepts entry of a password by a user such that transmission of a wave coded signal is secured, and that transmits the wave coded signal to the remotely operating vehicle upon entry of the password such that the wave coded signal is configured to cause the remotely operating vehicle to reduce speed.

Accordingly, independent claim 61 is not anticipated by Martens.

Independent claim 63 is directed to a method of remotely controlling a remotely operating vehicle comprising accepting a magnetic strip card applied by a user such that transmission of a wave coded signal is secured, and transmitting the wave coded signal to the remotely operating vehicle upon application of the magnetic strip card such that the wave coded signal is configured to cause the remotely operating vehicle to reduce speed.

Martens does not disclose any unit that accepts a magnetic strip card applied by a user such that transmission of a wave coded signal is secured, and that transmits the wave coded signal to the remotely operating vehicle upon application of the magnetic strip card such

that the wave coded signal is configured to cause the remotely operating vehicle to reduce speed.

Accordingly, independent claim 63 is not anticipated by Martens.

Independent claim 65 is directed to a method by which a vehicle is remotely controlled comprising receiving a wave coded signal transmitted from a point remote from the vehicle, sensing an electronic emission potentially interfering with the wave coded signal, reducing the speed of the vehicle in response to the wave coded signal, and reducing the speed of the vehicle in response to the sensed electronic emission.

Martens does not disclose sensing an electronic emission potentially interfering with a wave coded signal and reducing the speed of the vehicle in response to the sensed electronic emission.

Accordingly, independent claim 65 is not anticipated by Martens.

Independent claim 74 is directed to a method by which a vehicle is remotely controlled comprising receiving a wave coded signal transmitted from a point remote from the vehicle, reducing the speed of the vehicle in response to the wave coded signal, and temporarily delaying the reducing of the speed of the

vehicle in response to an input from an operator of the vehicle.

Martens does not disclose temporarily delaying the reducing of the speed of a vehicle in response to an input from an operator of the vehicle.

Accordingly, independent claim 74 is not anticipated by Martens.

Independent claim 76 is directed to a method for remotely controlling all receiving vehicles within an activation radius. A wave coded signal is transmitted to all of the receiving vehicles in the activation radius. The wave coded signal is received by all of the receiving vehicles in the activation radius. The speed of all of the receiving vehicles in the activation radius is reduced in response to the wave coded signal.

Martens does not disclose reducing the speed of all receiving vehicles in an activation radius. Instead, Martens is directed to a system that targets a specific vehicle and reduces the speed of only the targeted vehicle.

Accordingly, independent claim 76 is not anticipated by Martens.

Independent claim 77 is directed to a method for remotely controlling a vehicles comprising remotely

transmitting a wave coded signal so as to cause the vehicle to reduce speed, and recording the transmitting of the wave coded signal.

Martens does not disclose recording the use of a transmitter to remotely cause a vehicle to reduce speed.

Accordingly, independent claim 77 is not anticipated by Martens.

Independent claim 79 is directed to a method for remotely controlling a vehicle comprising remotely transmitting a wave coded signal by use of a transmitter so as to cause the vehicle to reduce speed, receiving a deactivation signal from a remote source, and deactivating the transmitter in response to the received deactivation signal.

Martens does not disclose deactivating a remote vehicle controlling transmitter in response to a received deactivation signal.

Accordingly, independent claim 79 is not anticipated by Martens.

Because independent claims 35, 54, 59, 61, 63, 65, and 74 are not anticipated by Martens, dependent claims 36-53, 55-58, 60, 62, 64, 66-73, and 75 are likewise not anticipated by Martens.

In section 6 of the Office Action, the Examiner rejected claims 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over Martens in view of Buck.

Buck does not make up for the deficiencies of Martens noted above with respect to independent claims 35, 54, 59, 61, 63, 65, 74, 76, 77, and 79. Therefore, the combination of Martens and Buck would not have suggested the inventions of these independent claims to one of ordinary skill in the art. Consequently, independent claims 35, 54, 59, 61, 63, 65, 74, 76, 77, and 79 would not have been unpatentable over Martens in view of Buck. Because independent claims 35, 54, 59, 61, 63, 65, and 74 would not have been unpatentable over Martens in view of Buck, dependent claims 36-53, 55-58, 60, 62, 64, 66-73, and 75 would not have been unpatentable over Martens in view of Buck.

In section 7 of the Office Action, the Examiner rejected claims 20 under 35 U.S.C. §103(a) as being unpatentable over Martens in view of Kelley.

Kelley does not make up for the deficiencies of Martens noted above with respect to independent claims 35, 54, 59, 61, 63, 65, 74, 76, 77, and 79. Therefore, the combination of Martens and Kelley would not have suggested to inventions of these independent claims to

one of ordinary skill in the art. Consequently,  
independent claims 35, 54, 59, 61, 63, 65, 74, 76, 77,  
and 79 would not have been unpatentable over Martens in  
view of Kelley. Because independent claims 35, 54, 59,  
61, 63, 65, and 74 would not have been unpatentable over  
Martens in view of Kelley, dependent claims 36-53, 55-58,  
60, 62, 64, 66-73, and 75 would not have been  
unpatentable over Martens in view of Kelley.

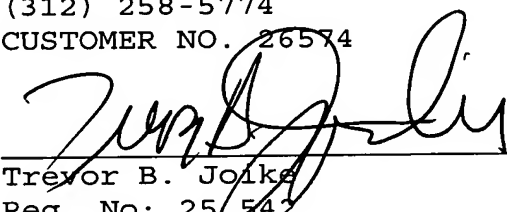
CONCLUSION

In view of the above, it is clear that the claims of the present application are patentable over the references applied by the Examiner. Accordingly, allowance of these claims and issuance of the above captioned patent application are respectfully requested.

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